

Application No.: 10/817628
Docket No.: AD6991USNA

Page 2

Amendments to Claims

1. (Withdrawn) An exterior pressure plate glazing element comprising a transparent laminate and an attachment means for holding the laminate in, or attaching the laminate to, a support structure, wherein: (1) the attachment means is bonded directly to at least one surface of a thermoplastic polymer interlayer; (2) the laminate comprises at least one layer of glass bonded directly to the interlayer on at least one glass surface; (3) the interlayer extends beyond at least one edge of the laminate and the extended portion of the interlayer is attached to the attachment means; (4) the attachment means is a clip useful for aligning and holding the laminate in a retaining channel of the support structure; (5) the clip comprises at least one mechanical interlocking extension useful for restricting rotational and/or transverse movement of the laminate within the channel or movement of the laminate out of the channel.

2. (Withdrawn) The glazing element of Claim 1 wherein the support structure is a frame.

3. (Withdrawn) The glazing element of Claim 2 wherein the frame comprises a mullion and a pressure plate, mullion and pressure plate forming the channel that geometrically constrains the glazing element clip and wherein the clip interlocking extension is a straight extension arm, a ball or socket, a "C"-shape, an "L"-shape, a "T"-shape, a hook, or any combination of these.

4. (Withdrawn) The glazing element of Claim 3 wherein the clip comprises an extension (9) as depicted in Figure 2.

5. (Withdrawn) The glazing element of Claim 3 as depicted in Figure 3.

6. (Withdrawn) The glazing element of Claim 5 wherein the clip additionally comprises a second extension (13) as depicted in Figure 4.

7. (Withdrawn) The glazing element of Claim 3 as depicted in Figure 5.

8. (Withdrawn) The glazing element of Claim 3 as depicted in Figure 6.

9. (Withdrawn) The glazing element of Claim 5 further comprising an adhesive as depicted in Figure 7.

Application No.: 10/817628
Docket No.: AD6991USNA

Page 3

10. (Withdrawn) The glazing element of Claim 1 wherein the thermoplastic interlayer is an ethylene copolymer.

11. (Withdrawn) The glazing element of Claim 10 wherein the interlayer is an ethylene copolymer comprising repeating units of an α , β -unsaturated carboxylic acid and/or a derivative thereof.

12. (Withdrawn) A process for attaching a first glazing element for exterior pressure plate glazing and a second glazing element for exterior pressure plate glazing to a support structure, comprising:

- a. Providing a support structure;
- b. Providing a first exterior pressure plate glazing element and a second exterior pressure plate glazing element, wherein
 - i. the first glazing element and the second glazing element each comprise a and an attachment means for holding the laminate in, or attaching the laminate to, a support structure;
 - ii. in each of the first glazing element and the second glazing element the attachment means is bonded directly to at least one surface of a thermoplastic polymer interlayer;
 - iii. the laminates each comprise at least one layer of glass bonded directly to the interlayer on at least one glass surface;
 - iv. the interlayer of each laminate extends beyond at least one edge of the laminate and the extended portion of the interlayer is attached to the attachment means;
 - v. in each of the glazing elements the attachment means is a clip useful for aligning and holding the laminate in a retaining channel of the support structure, wherein the clip comprises at least one mechanical interlocking extension useful for restricting rotational and/or transverse movement of the laminate within the channel or movement of the laminate out of the channel;
- c. Interlocking the first clip and the second clip to the support structure.

13. (Withdrawn) The process of Claim 12 wherein the support structure comprises a mullion which attaches to and holds the first and second glazing elements.

Application No.: 10/817628
Docket No.: AD6991USNA

Page 4

14. (Withdrawn) The process of claim 12 wherein the support structure comprises a mullion and the first and second glazing elements are held in a retaining channel formed by the mullion and a pressure plate.

15. (Withdrawn) The process of Claim 14 further comprising fastening the pressure plate and mullion together using a fastener that can be tightened or loosened to apply more or less pressure to the gaskets holding the glazing element.

16. (Currently Amended) A building comprising :
a support structure having a retaining channel formed therein,
a glazing element for exterior pressure plate glazing, the glazing element comprising:
(a) a laminate having at least one glass layer bonded to a thermoplastic polymer interlayer,

the glass layer having first and second planar surfaces and an edge,

the thermoplastic polymer interlayer being directly bonded to one of the planar surfaces of the glass layer,

a portion of the thermoplastic polymer interlayer extending past and overlying the edge of the glass layer, and

(b) an attachment clip for holding the laminate in or attaching the laminate to the support structure, the attachment clip including a mounting portion and an arm,

the mounting portion of the attachment clip being bonded directly to the extending portion of the thermoplastic polymer interlayer,

the arm extending away from the mounting portion in a direction that is generally perpendicular to the planar surfaces of the glass layer,

a portion of the arm projecting into the retaining channel to align and hold the laminate therein, the projecting portion of the arm interlocking the laminate to the support structure thereby to restrict rotational and/or transverse movement of the laminate within the channel or movement of the laminate out of the channel

a first glazing element for exterior pressure plate glazing, a second glazing element for exterior pressure plate glazing, and a support structure, wherein (a) the first glazing element and the second glazing element each comprise a and an attachment means for holding the laminate in, or attaching the laminate to, a support structure; (b) in each of the first glazing element and the second glazing element the attachment means is bonded directly to at least one surface of a thermoplastic polymer interlayer;

Application No.: 10/817628
Docket No.: AD6991USNA

Page 5

~~(e) the laminates each comprise at least one layer of glass bonded directly to the interlayer on at least one glass surface; (d) the interlayer of each laminate extends beyond at least one edge of the laminate and the extended portion of the interlayer is attached to the attachment means; (e) in each of the glazing elements the attachment means is a clip useful for aligning and holding the laminate in a retaining channel of the support structure, wherein the clip comprises at least one mechanical interlocking extension useful for restricting rotational and/or transverse movement of the laminate within the channel or movement of the laminate out of the channel; and (f) the first clip and the second clip interlocked to the support structure.~~

17. (Currently Amended) The building of Claim 16 wherein the first and second glazing elements are held in a retaining channel is formed by a mullion and a pressure plate.

18. (Currently Amended) The building of Claim ~~16~~ 17 wherein each of the first and second glazing element is ~~elements are~~ contacted by gaskets which assist in holding the glazing element ~~elements~~ in the channel ~~formed by the mullion and the pressure plate~~.

19. (Currently Amended) The building of Claim ~~18~~ 16 wherein the first laminate and the second laminate are further comprises:

a second glass layer having first and second planar surfaces and an edge thereon

one of the planar surfaces of the second glass layer being bonded to the thermoplastic polymer interlayer with a portion of the thermoplastic polymer interlayer extending past and overlying the edge of the second glass layer, thereby to form a glass/interlayer/glass laminates laminate .

20. (Currently Amended) The building of Claim ~~19~~ 18 further comprising a fastener that holds the pressure plate and mullion together, and that can be tightened or loosened to apply more or less pressure to the gaskets holding the glazing element.